REMARKS

The Office Action of June 23, 2008, has been carefully considered.

Objection has been raised to Claims 14 and 22, and the appropriate corrections have now been made hereinabove.

Claims 13-25 have been rejected under 35 USC 103(a) over Guiot et al in view of Burger.

The claimed invention is directed to the computer controlled production of a dental prosthesis, for example a bridge or a frame. For this purpose, it is necessary to form a duplicate of the region of the teeth where the restoration is to be inserted, and from this duplicate relevant sections are then detached and are scanned. The form of the restoration is then calculated taking into consideration the spatial allocation of the duplicate sections relative to each other. This is the essential method disclosed in Guiot et al.

The spatial allocation of the single duplicate sections require the scanning of the entire duplicate, as may be determined from the final paragraph of Claim 1 of Guiot et al, "combining the data of the duplicate and the data of duplicate sections in order to accurately determine the shape of the duplicate."

Moreover, this is confirmed by Guiot et al at column 3, lines 61-66:

> In this case the determined data must be stored as digital data, so that subsequently the different data of the individual duplicate sections, as well as the different data of the duplicate, can be combined in a so-called three-dimensional matching process, by means of which a precise image of the remaining tooth area is obtained in a digital representation.

In addition, at column 3, lines 34-43, which is actually cited in the Office action, Guiot et al states:

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The data from the duplicate sections determined
in the course of the determination of the
shapes of the individual duplicate sections
characterize the individual portions of the
remaining tooth area in a more accurate way
than the data for the entire duplicate, but the
relative positions of the individual duplicate
sections cannot be determined from these
duplicate section data. However, this is
unimportant, since the accuracy of the data
pertaining to the entire duplicate is
sufficient for determining the relative
position of the individual duplicate sections.

Thus, according to Guiot et al, the duplicate sections
must be oriented relative to the duplicate; the duplicate
therefore represents a reference for the duplicate sections.
For this reason, one following the method of Guiot et al must
always scan the entire duplicate and the subsequent matching
with the duplicate sections involves a large calculating
effort, since the duplicate sections need to be compared with
each section of the duplicate in order to determine whether or
not there is conformity. Hence, a relatively long time is
required until the spatial allocation of the single scanned
duplicate sections is carried out with this spatial allocation
necessary for producing an accurate dental restoration.

The improvement of the claimed invention comprises
individually referencing the duplicate sections as to spatial
allocation to each other in a reference stored in a computer
and which is independent of the duplicate.

Thus, the reference is already stored in the computer and
the duplicate sections are referenced according to this stored
reference. Use of this method of the invention enables
various possibilities, for example the base plate onto which
the duplicate is arranged can already comprise a reference.
Referencing the duplicate; and consequently the duplicate
sections, according to the reference stored into the computer

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when taking the impression is also possible, as is mentioned in the first paragraph on page 5 of the present specification.

Since the reference is already stored in the computer, a problem-free allocation of the duplicate sections to each other is possible without the need for a large calculation effort, because the single references are clearly arranged relative to each other. It is not necessary to compare in sections the total form, i.e. the spatial formation of the duplicate sections with the three-dimensional duplicate.

The Office action now recognizes that Guiot et al does not teach referencing the duplicate sections independently of the duplicate, but has cited Burger as teaching referencing the duplicate sections independent of the duplicate at column 5, lines 45-50. Applicants find no such teaching at column 5, lines 45-50, which is reproduced below:

> "The finished arrangement which comprises the tooth arrangement and the tooth arrangement support, is separated by vertical cuts into individual tooth segments 19 that with the aid of the base plate 2 can easily be combined again to form a complete tooth arrangement model."

Nothing in this sentence of Burger suggests individually referencing the duplicate sections as to spatial allocation to each other in a referencing stored in a computer.

In fact, Burger relates exclusively to the classic production of a dental prosthesis as can be seen at column 1, lines 13-31:

> For various dental work, it is necessary to have a true-to-size tooth and jaw model, a so-called master model. To produce such a model, a plaster of Paris imprint is taken of the jaw of the patient. The tooth arrangement model that is obtained is generally secured to a base plate, which is generally also made of plaster of Paris. For certain dental work, for example when fitting crowns, caps, or bridges, it is desirable to be able

to remove individual teeth, or groups of teeth in the form of segments, from the base plate, and to be able to accurately reinsert them after the work is complete. For this purpose, with conventional models, pins, so-called dowel pins, are provided, one end of which is fixedly connected to the tooth arrangement segments, with the other free end fitting into corresponding holes provided in the base plate. When the dowels pins are withdrawn from the holes, relatively high frictional forces result, preventing the segments from accidentally coming loose from the base plate.

In other words, Burger discloses a technique where sections of a model are to be removed from a base plate in order to process teeth or tooth groups present in the section. In order to allow a simple insertion of the sections, the base plate is structured by zigzag-like side walls 4,5 for instance, in order to insert corresponding complementary recesses in the base plate.

Thus, Guiot et al teaches that it is necessary to scan the entire duplicate in order to allocate spatial single duplicate sections, and Burger does not teach anything contrary to this method, and specifically does not teach referencing the duplicate sections based on a reference stored in a computer.

Withdrawal of this rejection is requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,

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